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# AN UNDESCRIBED SPECIES OF METEORUS FROM WISCONSIN (HYMENOPTERA: BRACONIDAE, EUPHORINAE)<sup>1</sup>

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During the study of insects associated with pulp logs stored in yards in central Wisconsin numerous specimens of an undescribed species of *Mctcorus* were collected in light traps, bait traps and in tanglefoot on yellow trap boards. This species runs to couplet 13 in Muesebeck's key (1923) and to *fumipennis*. The author wishes to express his appreciation to Mr. Muesebeck for the loan of specimens of M, fumipennis.

## Meteorus clinophthalmicus,<sup>2</sup> n. sp.

Holotype Q.—Length, exclusive of ovipositor, 2.8 mm.; antenna 2.5 mm.; abdomen 1.4 mm.; ovipositor 1 mm.

*Head.*—Transverse, 1.2 x width of thorax between tegulae, width  $39^3$ , greatest length 24, strongly receding behind eyes, maximum width across occipital earina 27; eyes large, bulging, ovoid (20 by 5), sparsely hairy; as seen from side temple 8, eye width 14; malar space 0.1 eye height; breadth of face measured across lower margins of antennal fossae 17, at narrowest point between eyes 14; distance from lower margin of antennal fossae to anterior tentorial pits 11; face minutely transversely rugoso-punctate with pale, short hairs which are denser laterally and below; elypeus convex, twice as wide as high; vertex and temples smooth and polished, with sparse short pale hairs; ocell-ocular line 3 x and postocellar line 2.67 x the greatest diameter of a lateral ocellus, the ocelli being relatively small and widely spaced; a groove extending from the median ocellus forward 0.3 the distance to the antennal fossae; flagellum 25-segmented, the length of basal segment 9, second 10 (3 x as long as broad), third 8, fourth 7, the remaining segments becoming gradually shorter and relatively broader; pedicel 0.5 as long as first flagellar segment.

Thorax.—Slender, 2.5 x as long as wide between tegulae, notaulices sharply impressed to a depth of about half their width, crenulate, joining behind to form an impressed, rugose, V-shaped area before the broad presentellar furrow, the latter divided by three ridges into four foveae, short pale scattered hairs near notaulices and on sides of lateral mesonotal lobes; scutellum relatively small (width 7, length 7) and strongly arched, smooth and shining, with a few scattered hairs; propodeum irregularly rugoso-recticulate, with larger areolae indistinctly formed due to some ridges being higher than others, slightly excavated centrally

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<sup>&</sup>lt;sup>2</sup>From  $\kappa \lambda i \hat{\omega}$ —slope and  $\delta \varphi \omega \alpha \lambda \mu \delta s$ —the eye. In reference to the inwardly slanting eyes.

 $<sup>^{3}60 = 1</sup>$  mm, in the measurements as given in the description.

at apex; sides of pronotum rugoso-punctate except along lower margin; mesopleurae mostly smooth above, with a broadly-impressed, coarsely roughened sternaulus; metapleurae rugose; venter of pro-and mesothorax smooth.

Legs.—Relatively long and slender.

Fore: coxa length 10; trochanter 15 (proximal segment 10 and distal 5, measured along ventral aspect of leg); femur 32 (width 7); tibia 36; tarsal segments 15, 8, 6, 5, 6; claws 3.

Middle: coxa length 11; trochanter 15 (proximal segment 9 and distal 6); femur 36 (width 7); tibia 43; tarsal segments 21, 9, 7, 5, 6.

Ilind: coxa length 18; trochanter 17 (proximal segment 9 and distal 8); femur 44 (width 10); tibia 65; tarsal segments 25, 12, 9, 6, 7. Length of inner spur 8, width of tibia at apex 6.

Wings.—Fore: very lightly and evenly infuscated, veins brown; length 140, maximum width 44; stigma brown, paler at base, length 28, width 9, inner side 18, outer side 13; radial cell ending 9 before wing tip; first abscissa of radius 2.5, second 3.5, third 43; second abscissa of cubitus 9; first intercubitus 12; second intercubitus 8; recurrent entering first cubital cell 2 before junction of first intercubitus; nervulus postfurcal for about its width.

Hind: nervellus 7, lower abscissa of basella 7, upper abscissa of basella 12.

Abdomen.—2.7 x as long as wide across apex of second segment; first segment 7 wide at base, 30 long and 18 wide at apex, spiracles at 12 from base and basal edge of dorsal fossae at 7, the ridge between the fossae extending posteriorly beyond spiracles, plate beyond spiracles with irregular wrinkles and elongate depressions which tend to follow an arched path, diverging outwardly at base and eonverging posteriorly near apex; segment two 21 wide at base, 32 wide at apex and 17 long, smooth, polished; suturiform articulation a weakly impressed straight line, indistinct; ovipositor slightly decurved and with a small dorsal noteh at 4 from the apex (total length 60).

Color: head very dark chocolate brown, face Burmese gold (3-C-11)<sup>4</sup>; apical third of elypeus, basal two-thirds of mandibles, scape and pedical apricot (10-G-7); first flagellar segment slightly browner than scape and the flagellar segments gradually becoming browner as apex is approached; eyes approximately Mohawk brown (7-H-12); palpi Polar Bear (9-B-2).

Thorax mostly Andorra brown (8-L-4), propectus testaceous (4-B-11); fore and middle coxae and trochanters and posterior trochanters close to Capucine Buff (9-E-4); posterior coxae, all femora, tibiae and tarsi tawny (13-D-10); tegulae, sclerites at base of forewing and leading edge of costa testaceous.

Abdomen testaceous to terra cotta (4-D-12) above in center, becoming darker brown apically and much more so on sides, first tergite also more infuscated on apical half; ovipositor clear golden wheat (11-D-7), ovipositor sheaths concolorous with propodeum.

*Type locality* and data on pin: Wood Co., Nekoosa, Wisconsin. IX-3-1948 R. D. Shenefelt. Bd. Type in collection of University of Wisconsin.

<sup>&</sup>lt;sup>4</sup>Color names from Maerz, A. and M. R. Paul. 1950. A Dictionary of Color. Ed. 2. McGraw-Hill. Numbers within parentheses refer to plate number, column and row.

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Molype  $\delta$ .—length 3.25 mm. Antenna 31-segmented, 3.9 mm. long. Similar to  $\mathfrak{P}$  but with relatively longer antennae; propodeum more sharply angled between dorsal and posterior faces, the dorsal face relatively longer, the central impression of the posterior face deeper; lower abscissa of basella equal to nervellus but only half as long as upper abscissa; face nearly twice as broad as deep between anterior tentorial pits and lower edge of antennal fossae (21 wide, 11 deep); first abdominal tergite relatively broader at apex (width 25, length 37). General coloration same as in holotype.

Wood Co., Nekoosa, Wisconsin. VIII-6-1948. R. D. Shenefelt. Bd. In collection of University of Wisconsin.

Paratypes.—To be deposited in the University of Wisconsin Collection, the U. S. National Museum, the Canadian National Collection, the Naturhistorisches Museum, Wien, Austria and the author's collection.

A total of 109  $\delta \delta$  and 88  $\Im \Im$  were taken in the Nekoosa yard during 1948 between July 7 and September 9 by W. W. Barrett or R. D. Shenefelt. A single specimen was captured June 16, 1949. The time of greatest abundance of adults is the latter part of August and early September.

This species varies considerably in size, ranging from 3.4 to 2.5 mm. in the  $\Im$  and from 4 to 2.5 mm. in the  $\delta$   $\delta$ . Color is variable as to degree of darkness but the pattern seems to be consistent. The relative size of the eyes, the extent to which they bulge and the degree of slant inward also varies to a considerable extent. In some specimens the face appears relatively narrow as compared to others due to the difference in eye slant. The proportions of the first tergite are subject to change. In four specimens ( $\Im \delta \delta$  and  $\Im \Im$ ) the second intercnbitus is totally wanting, and in one  $\delta$  the second intercubitus is fully developed in the left but absent in the right forewing.

Differs from *hypophloci* Cushman in the narrower, less robust thorax, much narrower face, more protuberant and more sloping eyes, shorter malar space and less strongly decurved ovipositor.

Clinophthalmicus can be separated from fumipennis Muesebeck by the relatively narrower head as compared to the width of the thorax between the tegulae. In fumipennis, the head width is 1.50 x that of the thorax while in clinophthalmicus it is 1.2 x. The relatively shorter lower abseissa of the basella and longer malar space will separate clinophthalmicus from angustipennis Muesebeck.

### REFERENCE

Muesebeck, C. F. W., 1923. A revsion of the North American species of Ichneumon-flies belonging to the genus *Metcorus* Haliday. Proc. U. S. Nat. Mus. 63(2470): 1-44.

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